		DEPARTMENT	ATE OF UTAH OF NATURAL RES F OIL, GAS AND M			FOR	RT 🖊		
APPLI	CATION FOR F	PERMIT TO DRILL			1. WELL NAME and Pe	d NUMBER lican Lake 16-12-7-2	0		
2. TYPE OF WORK DRILL NEW WELL	3. FIELD OR WILD	CAT UNDESIGNATED							
4. TYPE OF WELL Oil We	ell Coalbec	d Methane Well: NO			5. UNIT or COMMU	JNITIZATION AGRE AURORA (DEEP)	EMENT NAME		
6. NAME OF OPERATOR	ELK RESOUR	CES, LLC			7. OPERATOR PHO				
8. ADDRESS OF OPERATOR		0, Denver, CO, 80202	<u> </u>		9. OPERATOR E-M	AIL nisler@elkresources.n	et		
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)		11. MINERAL OWNE	RSHIP	10.	12. SURFACE OWN	IERSHIP			
Patent	16 1)	FEDERAL () IND:	IAN () STATE () FEE (iii)		IDIAN STATE			
13. NAME OF SURFACE OWNER (if box 12	Pelican Lake Fa	arms, LLC			14. SURFACE OWN	970-878-3420	12 = 'fee')		
15. ADDRESS OF SURFACE OWNER (if box	r 12 = 'fee') P.O. Box 8	333, ,	M,		16. SURFACE OWN	IER E-MAIL (if box	12 = 'fee')		
17. INDIAN ALLOTTEE OR TRIBE NAME		18. INTEND TO COM		ION FROM	19. SLANT				
(if box 12 = 'INDIAN')			ommingling Applicati	on) NO 🛑	VERTICAL DI	RECTIONAL 📵 H	ORIZONTAL 🛑		
20. LOCATION OF WELL	FOO	OTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN		
LOCATION AT SURFACE	1204 FNL	_ 2220 FWL	NENW	16	7.0 S	20.0 E	S		
		2040 FWL	NENW	16	7.0 S	20.0 E	S		
At Total Depth	660 FNL	1980 FWL	NENW	16	7.0 S	20.0 E	S		
21. COUNTY UINTAH		22. DISTANCE TO N	EAREST LEASE LIN 660	REST LEASE LINE (Feet) 23. NUMBER OF ACRES IN DRILLING UNIT 40					
		25. DISTANCE TO NE (Applied For Drilling							
27. ELEVATION - GROUND LEVEL		28. BOND NUMBER			29. SOURCE OF DE	RILLING WATER / PPROVAL NUMBER	TE ADDITOARIE		
4896			B000969		WATER RIGHTS A	MUNICIPAL	II AFFLICABLE		
		АТ	ITACHMENTS						
VERIFY THE FOLLOWING	ARE ATTACHE	D IN ACCORDANG	CE WITH THE UT	AH OIL AND	GAS CONSERVAT	ION GENERAL R	ULES		
WELL PLAT OR MAP PREPARED BY	LICENSED SURV	EYOR OR ENGINEER	СОМ	PLETE DRILLING	G PLAN				
AFFIDAVIT OF STATUS OF SURFACE	ACE) FORM) FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER							
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY TOPOGRAPHICAL MAP									
NAME Merrell Olsen		TITLE Engineer I		PHONE 303 3	339-1919				
SIGNATURE		DATE 09/27/2010		EMAIL molse	n@delekenergyus.cor	n			
API NUMBER ASSIGNED 43047512870000		APPROVAL		B	racqill				
				р	ermit Manager				

API Well No: 43047512870000 Received: 9/27/2010

	Proposed Hole, Casing, and Cement									
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)						
Cond	17.5	13.375	0	75						
Pipe	Grade	Length	Weight							
		75	0.0							

CONFIDENTIAL

API Well No: 43047512870000 Received: 9/27/2010

	Proposed Hole, Casing, and Cement								
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)					
Prod	7.875	5.5	0	8521					
Pipe	Grade	Length	Weight						
	Grade N-80 LT&C	8521	17.0			Г			

CONFIDENTIAL

API Well No: 43047512870000 Received: 9/27/2010

	Proposed Hole, Casing, and Cement								
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)					
Surf	12.25	9.625	0	1800					
Pipe	Grade	Length	Weight						
	Grade J-55 LT&C	1800	36.0						

CONFIDENTIAL

DRILLING PLAN

Elk Resources, LLC Aurora Deep Unit Pelican Lake 16-12-7-20

Sec 16 T7S R20E

Uintah County, Utah

ESTIMATED FORMATION TOPS

FORMATION	ТОР	COMMENTS
Duchesne River	Surface	Possible H ₂ O
Kick Off Point	100′	See Attached Directional Drilling Plan
Uinta	905′	Gas & Degraded Oil; Possible Brackish H ₂ O
Green River*	3,878′	Oil & Associated Gas
Wasatch*	7,880′	Oil & Associated Gas
TVD (MD)	8,500′ (8,521′	")

NOTE: Datum, Ground Level (GL) Elevation: 4,896'; Asterisks (*) denotes target pay intervals

A) The State of Utah, Division of Oil, Gas and Mining will be notified within 24 hours of spudding the well. The Bureau of Land Management will be notified within 24 hours of spudding the well.

CASING PROGRAM

CASING	HOLE SIZE	DEPTH SET (MD)	CSG SIZE	WGHT	GRD	THRD	CAPACITY (bbl/ft)
CONDUCTOR	17 ½	50-75	13 %				
SURFACE	12 1/4	1,800 ±	9 %	36.0	J-55	LTC	0.0773
PRODUCTION	7 %	8,521	5 ½	17.0	N-80	LTC	0.0232

NOTE: All casing depth intervals are to surface unless otherwise noted.

Casing Specs

SIZE (in)	ID (in)	DRIFT DIA (in)	WALL THICKNESS (in)	COLLASPE RESISTANCE (psi)	INTERNAL YEILD (psi)	TENSILE YEILD (lbs)	JOINT STRENGTH (lbs)
9 5/8	8.921	8.765	0.352	2,020	3,520	564,000	394,000
5 1/2	4.892	4.767	0.304	6,280	7,740	397,000	348,000

- **A)** The State of Utah, Division of Oil, Gas and Mining will be notified 24 hours prior to running casing and cementing.
- **B)** Prior to drilling out cement, all casing strings will be pressure tested in accordance with the State of Utah Administrative Code R649-3-7.4.

FLOAT EQUIPMENT

SURFACE (9 5/8): Float Shoe, 1 JNT Casing, Float Collar

Centralizers: Every Joint

PRODUCTION (5 1/2): Float Shoe, 1 JNT Casing, Float Collar

1st 4 Joints: every joint

Centralizers: Remainder: every other joint 500' into surface casing

Turbolizers: Every 5th joint up to 5000' depth

NOTE: 5 1/2" 17# N-80 or equivalent marker collar or casing joints will be placed at the top of the Green

River and approximately 400' above the Wasatch.

CEMENT PROGRAM

CONDUCTOR (13 3/8): Ready Mix

SURFACE (9 5/8): 750 sks 50:50 Poz Class G Cement with 8% Gel + 3% Potassium Chloride +

0.25 lbs/sks Cello Flake, 14.40 ppg, 1.24 cf/sk, 50% excess.

NOTE: The above volumes are based on a gauged-hole.

PRODUCTION (5 1/2): Cement Top: 500' into surface casing

Lead: Caliper plus 15%

150 sks Premium Lite II Cement with 0.5% Static Free 3% Potassium Chloride + 0.5% Cello Flake 2 lbs Kol Seal, 11.00 ppg,

3.49 cf/sk

Tail: 825 sks 50:50 Poz Class G Cement with .05 lbs/sks Static Free +

3% bwow Potassium Chloride + .25 lbs/sks Cello Flake, 14.40

ppg, 1.24 cf/sk, 50% excess.

NOTE: The above volumes are based on a gauged-hole.

PRESSURE CONTROL EQUIPMENT

A) The State of Utah, Division of Oil, Gas and Mining will be notified 24 hours prior to all BOP pressure tests.

B) The BOPE shall be closed whenever the well is unattended.

c) All BOP and BOPE tests will be in accordance with the State of Utah Administrative Code R649-3-7.

INTERVAL	BOP EQUIPMENT
0 - 1,800 ±	5,000# Ram type double BOP & Annular
$1,800 \pm - TD$	5,000# Ram type double BOP & Annular

NOTE: Estimated bottom hole pressure at TD will be approximately 4,250 psi. Drilling spool to accommodate choke and kill lines. BOP schematic diagram attached.

MUD PROGRAM

- **A)** Mud test will be performed at least every 24 hours and after mudding up to determine density, viscosity, gel strength, filtration, and pH.
- **B)** Gas-detecting equipment will be installed and operated in the mud-return system from top of Green River Formation to TD.

INTERVAL	MUD WGHT	VISC	FLUID LOSS	COMMENTS
$SURF - 1,800 \pm$	8.4 – 8.8 ppg	32	NC	Spud Mud
1,800 ± - TD	8.4 – 9.5 ppg		NC	Potassium/Gel/Lime

NOTE: Mud weight increases will be directed by hole conditions.

ABNORMAL CONDITIONS

INTERVAL	CONDITION
SURF - 1,800 ±	Lost Circulation Possible
$1,800 \pm - TD$	Lost Circulation Possible
NOTE: No abnormal pressui	res or temperatures anticipated

AUXILIARY EQUIPMENT

- A) Choke Manifold
- **B)** Upper and lower kelly cock with handle available
- c) Stabbing valve
- **D)** Safety valve and subs to fit all string connections in use

SURVEY & LOGGING PROGRAMS

- A) Cores: None anticipated.
- **B)** Testing: None anticipated.
- **C)** Directional Drilling: Directional tools will be used to locate the bottom hole approximately 600' south-southeast of surface hole (as per the attached well location plat and directional drilling plan).
- **D)** Open Hole Logs: TD to top of Green River Formation (~3,810'): resistivity, neutron density, gamma ray and caliper.
- **E)** Mud Logs: Computerized 2-person logging unit will catch and describe 10 foot samples from top of Green River Formation to TD; record and monitor gas shows and record drill times (normal mud logging duties).

HAZARDOUS MATERIALS

In accordance with Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III, no chemicals subject to reporting in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities (TPQ), will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

Geological Prognosis

Elk Resources, LLC Aurora Unit Pelican Lake 16-12-7-20 BHL 1980' FWL 660' FNL Section 16, T7S, R20E, Salt Lake Meridian **Uintah County, Utah**

Surface Formation: Duchesne River

Surface Elevation: 4,896′ G.L. **Estimated Formation Tops:**

Formation : Duc	nesne River	
Elevation : 4,896	5′ G.L.	
ed Formation To	ps:	
Formation Duchesne River Uinta Green River T. Oil Mkr L. Green River* Carbonate Mkr* GRRVY Mkr*	Top - feet Surface 905' 3,878' 5,425' 6,340' 6,500' 6,750'	Expected Production Possible Water Gas and Degraded Oil, Possible brackish water Oil Shale Oil Oil and associated gas Oil and associated gas Oil and associated gas Oil and associated gas
Wasatch* TOTAL DEPTH	7,880′ 8,500′	Oil and associated Gas Oil and associated Gas

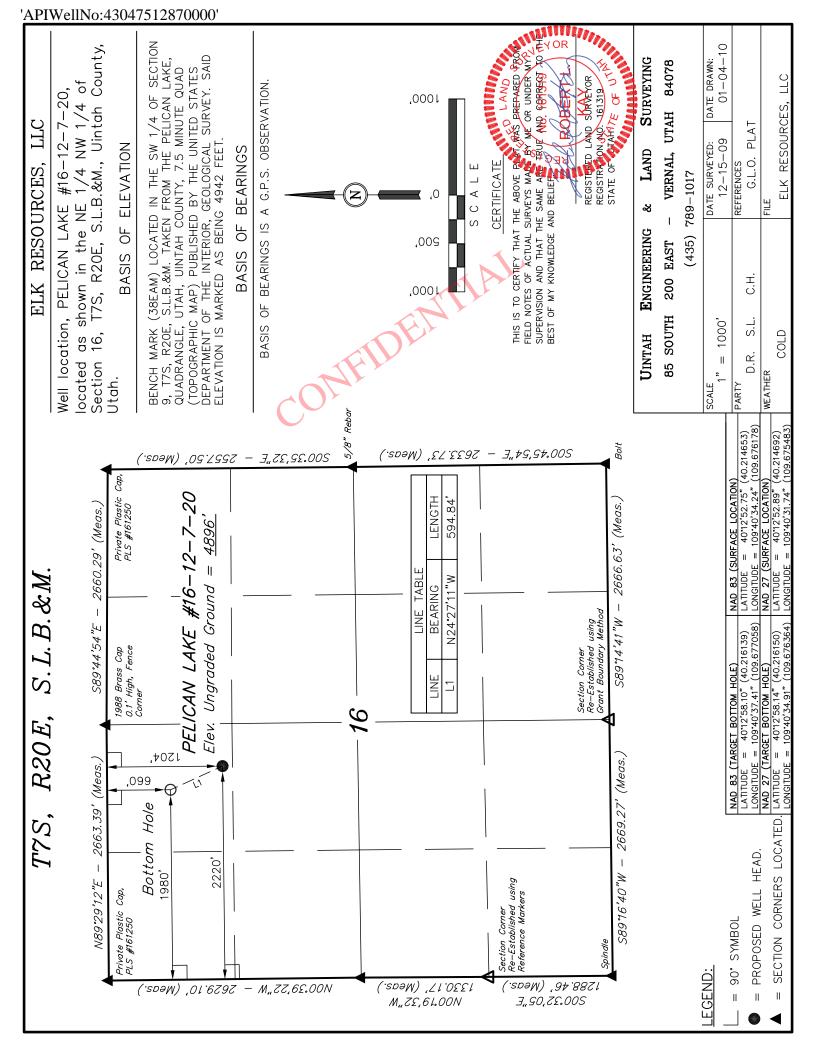
Correlation wells – Rogers 13-16 SW section 16 T7S-R20E and Rogers 16-43 SWSE section 16 T7S-R20E.

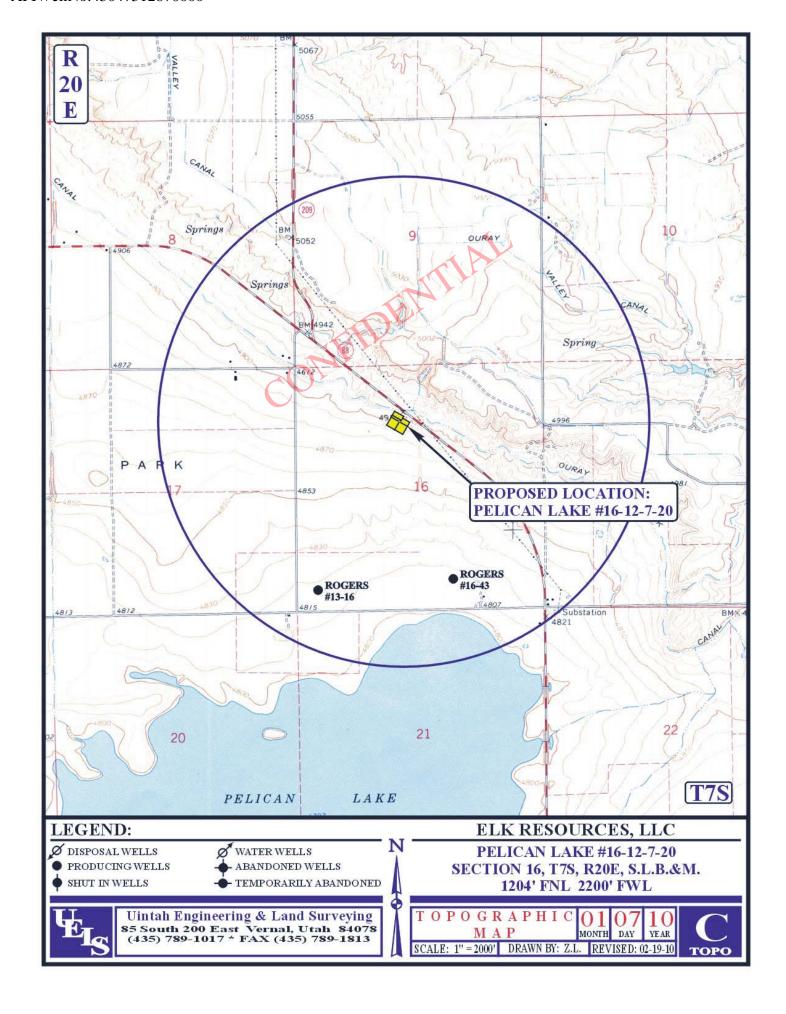
Geologic Discussion

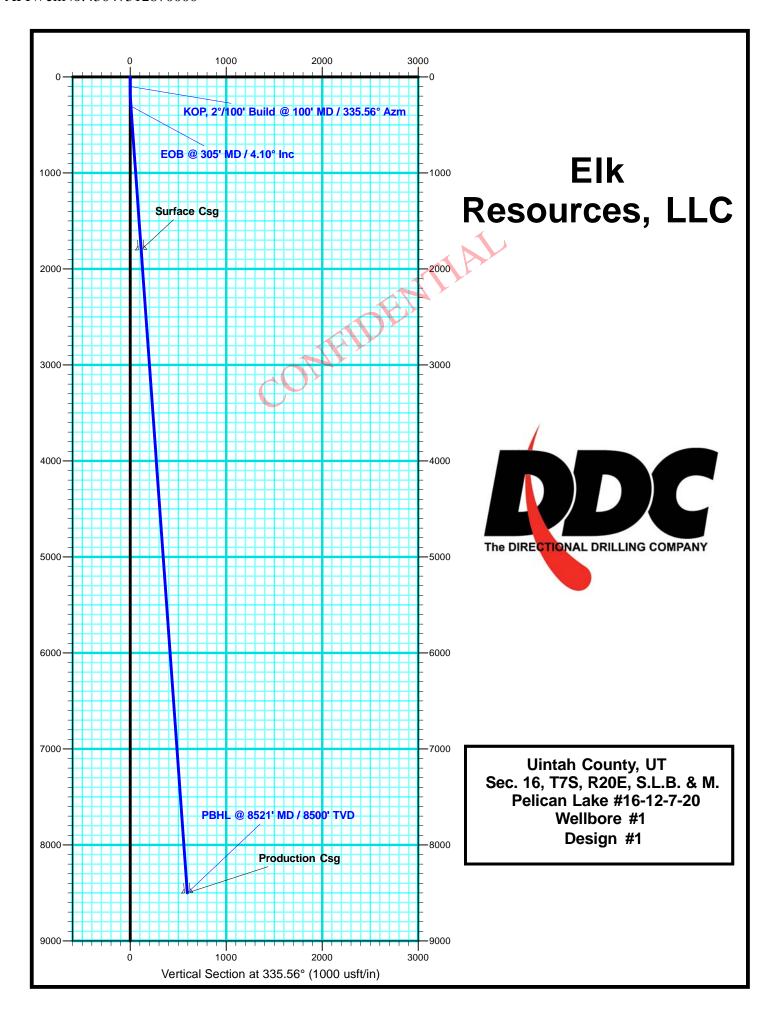
The Aurora Unit Pelican Lake 16-12-7-20 is being drilled as a development well under the F/O terms of the EnCana agreement, within the Rogers Earned Block. It is proposed as a Green River development well, which will satisfy the continual development program for 160 acre spacing. The proposed well is an offset to the Aurora Unit Rogers 13-16 and Rogers 16-43 wells located in the SW and SE of section 16 T7S-R20E and drilled as Mesaverde tests with a TD of 9,905' and 10,000' respectively. Both these wells are producing oil from the Upper Wasatch and Green River.

The Green River consists of marginal lacustrine fluvial and shoreline sands and bar and shoreline carbonates. Expected porosities in the pay zones are 8-12%, resistivities greater than 40 ohm/meters and calculated water saturations less than 55%. The Wasatch fluvial and lacustrine sands are also a potential target. This proposed well will test geologically and seismically interpreted fractured intervals as dimming events and low amplitudes as picked from the Aurora 3-D even though located at the guestionable interpretation edge of the survey. This is based on model comparisons from the current producing wells and evaluation of Imaging Log from the 16-43 well and will be good match and test for this interpretation. The well is also located on a NW plunging structural nose associated with a basement fault that extends up into the Mancos. This deep faulting and compaction drape should enhance the development of fractures.

^{* -} Proposed production formations



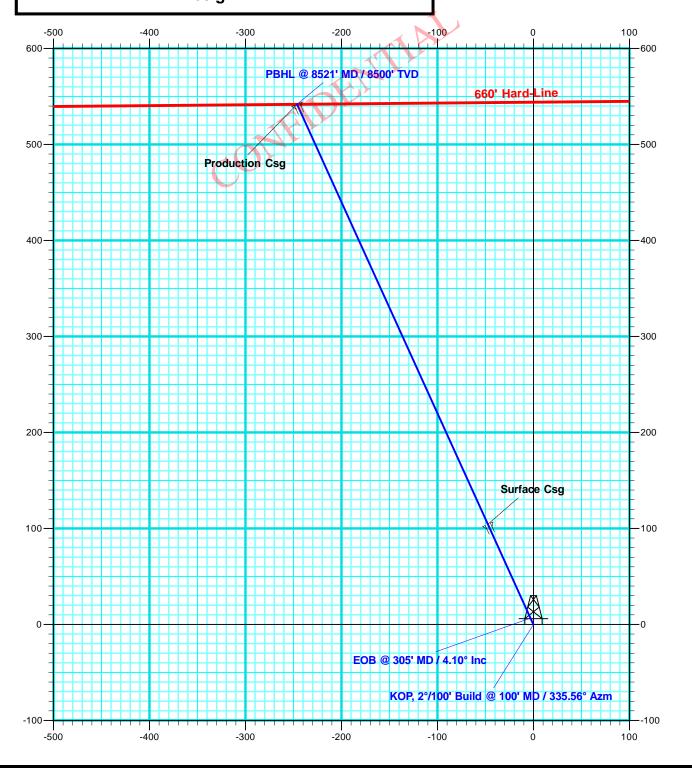




Elk Resources, LLC

Uintah County, UT Sec. 16, T7S, R20E, S.L.B. & M. Pelican Lake #16-12-7-20 Wellbore #1 Design #1







Database: EDM 5000.1 Single User Db

Company: Elk Resources Project: Uintah County, UT

Sec. 16, T7S, R20E, S.L.B. & M. Site:

Well: Pelican Lake #16-12-7-20

Wellbore: Wellbore #1 Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Pelican Lake #16-12-7-20

WELL @ 4896.0usft (Original Well Elev) WELL @ 4896.0usft (Original Well Elev)

Minimum Curvature

Project Uintah County, UT

Map System: US State Plane 1983

North American Datum 1983 Geo Datum:

Map Zone: Utah Central Zone System Datum: Mean Sea Level

Sec. 16, T7S, R20E, S.L.B. & M. Site

Northing: 7,252,105.72 usft Site Position: Latitude: 40° 12' 52.750 N From: Lat/Long Easting: 2,149,704.97 usft Longitude: 109° 40' 34.240 W

Position Uncertainty: 0.0 usft **Slot Radius:** 13-3/16 " **Grid Convergence:** 1.17°

Well Pelican Lake #16-12-7-20

Well Position +N/-S 0.0 usft Northing: 7,252,105.71 usft Latitude: 40° 12' 52.750 N +E/-W 0.0 usft Easting: 2,149,704.97 usft Longitude: 109° 40' 34.240 W

Position Uncertainty 0.0 usft Wellhead Elevation: Ground Level: 4,896.0 usft

Wellbore #1 Wellbore Field Strength Magnetics **Model Name** Sample Date **Declination Dip Angle** (°) (°) (nT) 9/16/2010 52.496 IGRF2010 11.28 66.03

Design Design #1

Audit Notes:

Version: Phase: **PLAN** Tie On Depth: 0.0

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.0 0.0 0.0 335.56

Plan Sections Measured Vertical Dogleg Build Turn Depth Inclination **Azimuth** Depth +N/-S +E/-W Rate Rate Rate **TFO** (usft) (usft) (usft) (°/100usft) (°/100usft) (°/100usft) (usft) (°) **Target** (°) (°) 0.0 0.00 0.00 0.0 0.0 0.0 0.00 0.00 0.00 0.00 100.0 0.00 0.00 100.0 0.0 0.0 0.00 0.00 0.00 0.00 305.1 4.10 335.56 305.0 6.7 -3.0 2.00 2.00 -11.91 335.56 8,521.2 4.10 8,500.0 541.8 -246.2 0.00 0.00 0.00 0.00 PBHL - Pelican Lak 335.56



Database: EDM 5000.1 Single User Db

Company: Elk Resources
Project: Uintah County, UT

Site: Sec. 16, T7S, R20E, S.L.B. & M. Well: Pelican Lake #16-12-7-20

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Pelican Lake #16-12-7-20

WELL @ 4896.0usft (Original Well Elev) WELL @ 4896.0usft (Original Well Elev)

True

Minimum Curvature

Design:		Design #1								
Planned Surv	vey									
Meası Dep (usf	th	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
		0' Build @ 100								
2	100.0 200.0 300.0	0.00 2.00 4.00	0.00 335.56 335.56	100.0 200.0 299.8	0.0 1.6 6.4	0.0 -0.7 -2.9	0.0 1.7 7.0	0.00 2.00 2.00	0.00 2.00 2.00	0.00 0.00 0.00
	@ 305 305.1	' MD / 4.10° In 4.10	335.56	305.0	6.7	-3.0	7.3	2.00	2.00	0.00
5 6 7	400.0 500.0 500.0 700.0 800.0	4.10 4.10 4.10 4.10 4.10	335.56 335.56 335.56 335.56 335.56	399.6 499.3 599.1 698.8 798.6	12.9 19.4 25.9 32.4 38.9	-5.8 -8.8 -11.8 -14.7 -17.7	14.1 21.3 28.4 35.6 42.7	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
1,0 1,1 1,2	000.0 000.0 100.0 200.0 300.0	4.10 4.10 4.10 4.10 4.10	335.56 335.56 335.56 335.56 335.56	898.3 998.0 1,097.8 1,197.5 1,297.3	45.4 51.9 58.5 65.0 71.5	-20.6 -23.6 -26.6 -29.5 -32.5	49.9 57.1 64.2 71.4 78.5	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
1,5 1,6 1,7	100.0 500.0 500.0 700.0 800.0	4.10 4.10 4.10 4.10 4.10	335.56 335.56 335.56 335.56 335.56	1,397.0 1,496.8 1,596.5 1,696.3 1,796.0	78.0 84.5 91.0 97.5 104.0	-35.4 -38.4 -41.4 -44.3 -47.3	85.7 92.8 100.0 107.1 114.3	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
Surfa	ace Cs									
1,9 2,0 2,1	304.0 900.0 900.0 100.0 200.0	4.10 4.10 4.10 4.10 4.10	335.56 335.56 335.56 335.56 335.56	1,800.0 1,895.7 1,995.5 2,095.2 2,195.0	104.3 110.6 117.1 123.6 130.1	-47.4 -50.2 -53.2 -56.2 -59.1	114.6 121.4 128.6 135.7 142.9	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
2,4 2,5 2,6	300.0 400.0 500.0 600.0 700.0	4.10 4.10 4.10 4.10 4.10	335.56 335.56 335.56 335.56 335.56	2,294.7 2,394.5 2,494.2 2,593.9 2,693.7	136.6 143.1 149.6 156.2 162.7	-62.1 -65.0 -68.0 -71.0 -73.9	150.1 157.2 164.4 171.5 178.7	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
2,9 3,0 3,1	300.0 900.0 900.0 100.0 200.0	4.10 4.10 4.10 4.10 4.10	335.56 335.56 335.56 335.56 335.56	2,793.4 2,893.2 2,992.9 3,092.7 3,192.4	169.2 175.7 182.2 188.7 195.2	-76.9 -79.8 -82.8 -85.8 -88.7	185.8 193.0 200.1 207.3 214.4	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
3,4 3,5 3,6	300.0 400.0 500.0 600.0 700.0	4.10 4.10 4.10 4.10 4.10	335.56 335.56 335.56 335.56 335.56	3,292.2 3,391.9 3,491.6 3,591.4 3,691.1	201.7 208.3 214.8 221.3 227.8	-91.7 -94.6 -97.6 -100.6 -103.5	221.6 228.8 235.9 243.1 250.2	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
3,9 4,0 4,1	300.0 900.0 900.0 100.0 200.0	4.10 4.10 4.10 4.10 4.10	335.56 335.56 335.56 335.56 335.56	3,790.9 3,890.6 3,990.4 4,090.1 4,189.8	234.3 240.8 247.3 253.9 260.4	-106.5 -109.4 -112.4 -115.4 -118.3	257.4 264.5 271.7 278.8 286.0	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
4,3 4,4 4,5 4,6	300.0 400.0 500.0 600.0 700.0	4.10 4.10 4.10 4.10 4.10	335.56 335.56 335.56 335.56 335.56	4,289.6 4,389.3 4,489.1 4,588.8 4,688.6	266.9 273.4 279.9 286.4 292.9	-121.3 -124.2 -127.2 -130.2 -133.1	293.1 300.3 307.5 314.6 321.8	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00



Database: EDM 5000.1 Single User Db

Company: Elk Resources Project: Uintah County, UT

Sec. 16, T7S, R20E, S.L.B. & M. Site: Well: Pelican Lake #16-12-7-20

Wellbore: Wellbore #1 **Local Co-ordinate Reference:**

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Pelican Lake #16-12-7-20

WELL @ 4896.0usft (Original Well Elev) WELL @ 4896.0usft (Original Well Elev)

Minimum Curvature

Design:	Design #1								
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,800.0	4.10	335.56	4,788.3	299.4	-136.1	328.9	0.00	0.00	0.00
4,900.0	4.10	335.56	4,888.1	306.0	-139.0	336.1	0.00	0.00	0.00
5,000.0	4.10	335.56	4,987.8	312.5	-142.0	343.2	0.00	0.00	0.00
5,100.0	4.10	335.56	5,087.5	319.0	-145.0	350.4	0.00	0.00	0.00
5,200.0	4.10	335.56	5,187.3	325.5	-147.9	357.5	0.00	0.00	0.00
5,300.0	4.10	335.56	5,287.0	332.0	-150.9	364.7	0.00	0.00	0.00
5,400.0	4.10	335.56	5,386.8	338.5	-153.8	371.8	0.00	0.00	0.00
5,500.0	4.10	335.56	5,486.5	345.0	-156.8	379.0	0.00	0.00	0.00
5,600.0	4.10	335.56	5,586.3	351.5	-159.8	386.1	0.00	0.00	0.00
5,700.0	4.10	335.56	5,686.0	358.1	-162.7	393.3	0.00	0.00	0.00
5,800.0	4.10	335.56	5,785.7	364.6	-165.7	400.5	0.00	0.00	0.00
5,900.0	4.10	335.56	5,885.5	371.1	-168.6	407.6	0.00	0.00	0.00
6,000.0	4.10	335.56	5,985.2	377.6	-171.6	414.8	0.00	0.00	0.00
6,100.0	4.10	335.56	6,085.0	384.1	-174.6	421.9	0.00	0.00	0.00
6,200.0	4.10	335.56	6,184.7	390.6	-177.5	429.1	0.00	0.00	0.00
6,300.0	4.10	335.56	6,284.5	397.1	-180.5	436.2	0.00	0.00	0.00
6,400.0	4.10	335.56	6,384.2	403.7	-183.4	443.4	0.00	0.00	0.00
6,500.0	4.10	335.56	6,484.0	410.2	-186.4	450.5	0.00	0.00	0.00
6,600.0	4.10	335.56	6,583.7	416.7	-189.4	457.7	0.00	0.00	0.00
6,700.0	4.10	335.56	6,683.4	423.2	-192.3	464.8	0.00	0.00	0.00
6,800.0	4.10	335.56	6,783.2	429.7	-195.3	472.0	0.00	0.00	0.00
6,900.0	4.10	335.56	6,882.9	436.2	-198.2	479.2	0.00	0.00	0.00
7,000.0	4.10	335.56	6,982.7	442.7	-201.2	486.3	0.00	0.00	0.00
7,100.0	4.10	335.56	7,082.4	449.2	-204.2	493.5	0.00	0.00	0.00
7,200.0	4.10	335.56	7,182.2	455.8	-207.1	500.6	0.00	0.00	0.00
7,300.0	4.10	335.56	7,281.9	462.3	-210.1	507.8	0.00	0.00	0.00
7,400.0	4.10	335.56	7,381.6	468.8	-213.0	514.9	0.00	0.00	0.00
7,500.0	4.10	335.56	7,481.4	475.3	-216.0	522.1	0.00	0.00	0.00
7,600.0	4.10	335.56	7,581.1	481.8	-219.0	529.2	0.00	0.00	0.00
7,700.0	4.10	335.56	7,680.9	488.3	-221.9	536.4	0.00	0.00	0.00
7,800.0	4.10	335.56	7,780.6	494.8	-224.9	543.5	0.00	0.00	0.00
7,900.0	4.10	335.56	7,880.4	501.4	-227.8	550.7	0.00	0.00	0.00
8,000.0	4.10	335.56	7,980.1	507.9	-230.8	557.8	0.00	0.00	0.00
8,100.0	4.10	335.56	8,079.9	514.4	-233.8	565.0	0.00	0.00	0.00
8,200.0	4.10	335.56	8,179.6	520.9	-236.7	572.2	0.00	0.00	0.00
8,300.0 8,400.0 8,500.0 PBHL @ 8	4.10 4.10 4.10 521' MD / 8500	335.56 335.56 335.56 ' TVD - Prodi	8,279.3 8,379.1 8,478.8 uction Csg	527.4 533.9 540.4	-239.7 -242.6 -245.6	579.3 586.5 593.6	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
8,521.2	4.10	335.56	8,500.0	541.8	-246.2	595.1	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL - Pelican Lake - plan hits target of - Point		0.00	8,500.0	541.8	-246.2	7,252,642.40	2,149,447.76	40° 12' 58.105 N	109° 40' 37.414 W



Database: EDM 5000.1 Single User Db

Company: Elk Resources
Project: Uintah County, UT

Site: Sec. 16, T7S, R20E, S.L.B. & M.

Well: Pelican Lake #16-12-7-20

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Pelican Lake #16-12-7-20

WELL @ 4896.0usft (Original Well Elev) WELL @ 4896.0usft (Original Well Elev)

True

Minimum Curvature

Casing Points								
_								
N	Measured	Vertical				Casing	Hole	
	Depth	Depth				Diameter	Diameter	
	(ueft)	(ueft)	Nom	_	1	(")	(")	

 1,804.0
 1,800.0
 Surface Csg
 9-5/8
 12-1/4

 8,521.2
 8,500.0
 Production Csg
 5-1/2
 7-7/8

Plan Annotations			
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S +E/-W (usft) (usft)	Comment
100.0 305.1 8,521.2	100.0 305.0 8,500.0	0.0 0.0 6.7 -3.0 541.8 -246.2	KOP, 2°/100' Build @ 100' MD / 335.56° Azm EOB @ 305' MD / 4.10° Inc PBHL @ 8521' MD / 8500' TVD

'APIWellNo:43047512870000'

SURFACE USE AGREEMENT

PELICAN LAKE 16-12-7-20 WELL

PELICAN LAKE 10-12-	7-20 WELL
THIS AGREEMENT dated July 20, 2010	by and between
PELICAN LAKE FARMS, LLC	, whose address is
PO BOX 833, MEEKER, CO 81641	, hereinafter referred to as "Surface Owner", and
ELK RESOURCES, LLC , whose address is	1401 17 TH STREET, SUITE 700, DENVER, CO 80202
hereinafter referred to as "Operator".	
WITNESSETH:	
WHEREAS, Surface Owner represents that they are the owners in f following described lands in Uintah County,	tee and in possession of the surface estate for the, hereinafter referred to as "Lands", to wit:
A tract of land lying in the NENW of Section 16, Township 7 Sou or less, such tract being more particularly described on the plat atta	
WHEREAS, Operator has or will acquire certain leasehold into plans to conduct drilling and subsequent production operations on the	

gas leases covering the mineral estate of the Lands; and

WHEREAS, the parties believe that it is in their mutual best interest to agree to the amount of damages to be assessed incident to the operations of Operator on the premises in the exploration for, development and production of oil, gas and/or other leasehold substances under the terms of those certain oil and gas leases now owned or which may be acquired by

WHEREAS, Surface Owner is generally aware of the nature of the operations which may be conducted under oil and

WHEREAS, the parties believe that a reasonable estimate can be made of the extent of damages which will result from the exploration, development and production operations contemplated by such oil and gas leases.

Operator covering portions of the mineral estate of the Lands; and,

NOW, THEREFORE, in consideration of ten dollars and other valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows:

- 1. Operator has the right of ingress and egress and to the use of those portions of the Lands which it requires for oil and gas exploration, development and production operations, including tank batteries and other production facilities and the transportation of produced substances from the leasehold, and also the right to construct and use roads and pipelines across portions of the Lands. Operator shall pay Surface Owner as liquidated damages the following sum as full settlement and satisfaction of all damages growing out of, incident to, or in connection with the usual and customary exploration, drilling, completion, sidetracking, reworking, equipping and production operations, contemplated by the oil and gas leases covering the Lands, unless otherwise specifically provided herein:
 - a. <u>Wellsite and Access</u>. **Fifteen Thousand Dollars (\$15,000.00)** for the **PELICAN LAKE 16-12-7-20** wellsite and related access road to be constructed and located on the Lands, together with any lands used for production facilities or other necessary facilities in connection with the wellsite. If, by reasons directly resulting from the operations of Operator, there is damage to real or personal property upon the Lands which is not associated with usual and customary operations, such as (but not limited to) damage to livestock, structures, buildings, fences, culverts, cement ditches, irrigation systems, and natural water ways, such damage will repaired or replaced by Operator, or Operator will pay reasonable compensation to Surface Owner for such additional damage.
 - b. <u>Power Lines and Pipelines</u>. For each new power line or new pipeline installed by Operator, Operator shall pay to Owner the sum of **Ten Dollars (\$10.00)** per rod for each such line. Operator shall be responsible for back filling, re-packing, re-seeding, and re-contouring the surface so as not to interfere with Owner's operations. Operator shall provide Owner with a survey showing the location of all power lines, pipelines and gathering systems promptly after their installation. All pipelines and gathering systems located by Operator on the Lands shall be buried to a depth of at least three (3) feet below the surface, and surface marked in accordance with industry standards. All easements and rights-of-way for power lines and pipelines shall be fifty (50) feet in width during initial construction and reclamation activities, and after completion of initial construction and reclamation activities such easements and rights-of-way shall revert to twenty-five (25) feet in width being twelve and one-half (12.5) feet on each side of the centerline of the line. Notwithstanding, Operator shall have the right to temporarily lay pipelines on the surface for a period not to exceed three years with the consent of the Owner, which consent shall not be unreasonably withheld. All power lines shall be installed underground to a depth of at least three (3) feet below the surface whenever reasonably practical to do so.
- 2. Operator agrees to consult with the surface owner and/or tenant as to all routes of ingress and egress. Prior to the construction of any roads, pipelines, tank battery installations, or installation of any other equipment on the leased premises, Operator shall consult with the surface owner and/or tenant as to the location and direction of same.
- 3. It is the intention of the parties hereto to cause as little interference with farming operations on the leased premises as reasonably possible, including but specifically not limited to the operation of any pivotal irrigation sprinkler system, or any other irrigation method. If any circular irrigation sprinkler system is in use at the time of initial drilling operations on the leased premises, then any subsequent production equipment, including but specifically not limited to pump jacks, hydraulic lifting equipment, or any other equipment necessary to produce any oil or gas from such well, shall be recessed to such depths, or ramps constructed, so as to allow the continued use of such circular irrigation system.
- 4. In the event any well hereunder is plugged and abandoned, Operator agrees that Operator will, within a reasonable time,

restore Surface Swher's surface estate as near as practical to its original condition found prior to Operator's operations. It is understood and agreed that Surface Owner may elect in writing, prior to cessation of operations of Operator, to have any road constructed under the terms of this Agreement remain upon the property, in which event Operator agrees to leave such road or roads in reasonable condition.

- 5. Operator is responsible for acquiring all necessary permits, licenses, fees, etc. incident to its operations on the Lands.
- 6. In the event Surface Owner considers that Operator has not complied with all its obligations hereunder, both express and implied, Surface Owner shall notify Operator in writing, setting out specifically in what respects Operator has breached this contract. Operator shall then have sixty (60) days to meet or commence to meet all or any part of the breaches alleged by Surface Owner. The service of said notice shall be precedent to the bringing of any action by Surface Owner for any cause, and no such action shall be brought until the lapse of sixty (60) days after service of such notice on Operator. In the event of litigation, the prevailing party's reasonable attorney's fees will be paid by the opposing party.
- 7. Operator shall be responsible and shall remain liable for any environmental problems on the subject lands which are caused by or through its operations. This assumption of liability, however, does not include any third-party operations on the subject lands or any actions by Surface Owner which could cause environmental problems, but is limited solely to the actions of Operator. To the extent that any such claims are asserted, Operator will be responsible for any remediation required as provided by state regulations.
- 8. In the event Surface Owner owns less than the entire fee interest in the Lands, then any payment provided for in this Agreement shall be proportionately reduced to the interest owned.
- 9. This Agreement shall remain in full force and effect for a term of 10 years from and after the date hereof and for so long thereafter as Operator's oil and gas exploration, development and production operations affecting the Lands continue.
- 10. When the word "Operator" is used in this Agreement, it shall also mean the successors and assigns of Operator, including but not limited to its employees and officers, agents, affiliates, contractors, subcontractors and/or purchasers.
- 11. This Agreement shall be binding upon and inure to the benefit of the heirs, successors and assigns of the parties.

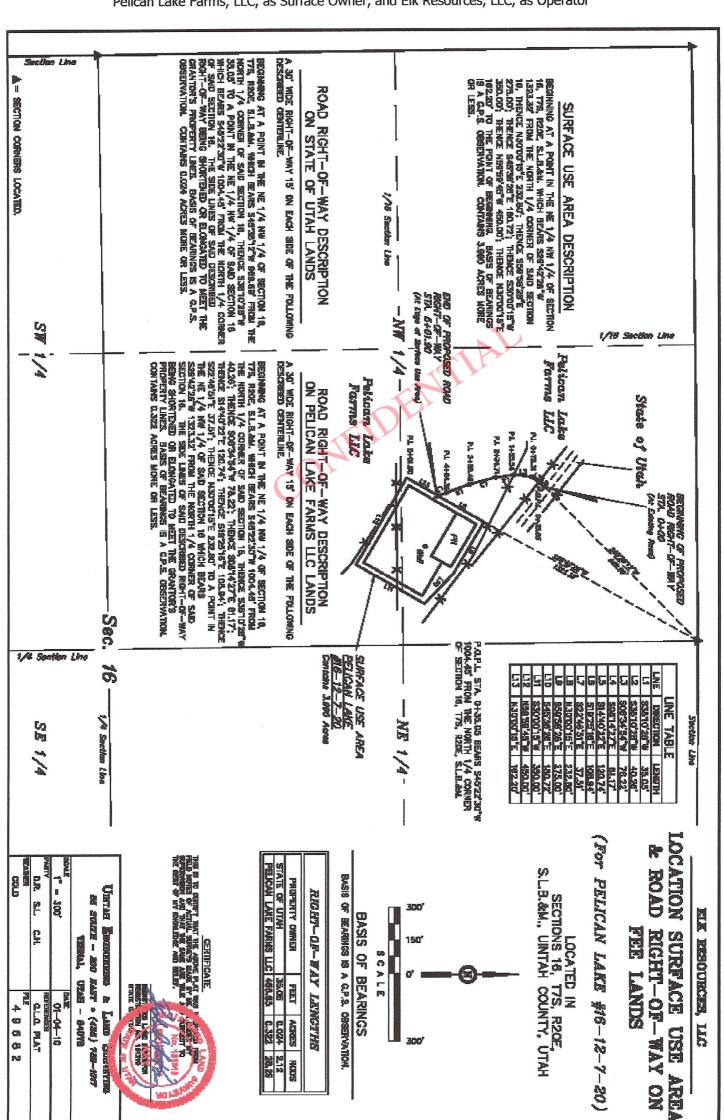
ADDITIONAL PROVISIONS:

12. Upon Surface Owner's execution of this Agreement, Operator shall pay Surface Owner a non-refundable One Thousand

Dollar (\$1,000.00) advance toward the Fifteen Thousand Dollar (\$15,000.00) payment for damages for the wellsite and access provided in paragraph 1.a. above. Operator shall pay Surface Owner the balance owed for damages for the wellsite and access of Fourteen Thousand Dollars (\$14,000.00) prior to commencing any construction activities on the Lands.
SURFACE OWNER: By: By: By:
SS/Tax ID#
STATE OF Utah COUNTY OF Untah
BEFORE ME, the undersigned, a Notary Public, in and for said County and State, on this 2 day of uly , 20 0, personally appeared, to me known to be the
described herein and who executed the within and foregoing instrument of writing and acknowledged to me that duly executed same as free and voluntary act and deed for the uses and purposes herein set forth and in the capacity stated herein.
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year last above written. My Commission Expires: Way 14, 2012 Notary Public:

MIGKIE L ALLRED Hetery Public - State of Utah Commission No. 374344 My Commission Expires on May 14, 2012 **EXHIBIT**

Attached to and made a part of that certain Surface Use Agreement dated July 20, 2010, by and between Pelican Lake Farms, LLC, as Surface Owner, and Elk Resources, LLC, as Operator



SURFACE USE PLAN

Pelican Lake 16-12-7-20

Attachment to Permit to Drill

The dirt contractor will be provided with an approved copy of the surface use plan of operations before initiating construction.

The onsite inspection for the referenced well is pending with the Utah Division of Oil, Gas and Mining and the landowner.

1. Existing Roads:

- a. The proposed well site is located approximately 22 miles Southwest of Vernal, Utah.
- **b.** The following are directions to the proposed well site:

Proceed in a Westerly direction from Vernal, Utah along U.S. Highway 40 approximately 14 miles to the junction of State Highway 88 to the South; turn left and proceed in a Southerly direction approximately 7 miles to the junction of this road and an existing road to the southeast; turn left and proceed in a Southeasterly direction approximately 0.5 miles to the beginning of the proposed access to the South; follow road flags in a Southerly direction approximately 0.1 miles to the proposed location. See attached plat.

- **c.** The use of roads under Federal, State and County Road Department maintenance are necessary to access the Pelican Lake 16-12-7-20 location. All existing roads will be maintained and kept in good repair during all phases of operation.
- **d.** Vehicle operators will obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.
- **e.** Since no improvements are anticipated to the State, County, or BLM access roads, no topsoil striping will occur.

2. Planned Access Roads:

- **a.** From the existing surface highway (State Route 88), a new access is proposed trending Southerly approximately 500' feet to the proposed well site. The access consists of entirely new disturbance across uncultivated ground and crosses no significant drainages. Precautions will be made due to an existing power line running parallel to the existing county road.
- **b.** The proposed access road crosses surface owned by Pelican Lake Farms LLC. A copy of the surface damage agreement is attached.
- c. The proposed access road will consist of a 20' wide travel surface within a 30' wide right of way.
- d. No turnouts are proposed since the access road is only 0.10 miles long and adequate site distance exists in all directions.
- No low water crossings are anticipated. Adequate drainage structures will be incorporated into the road.
- **f.** Two gates are anticipated at this time as one fence is crossed leaving the paved surface; and an existing fence is crossed on the surface owner's property.
- g. Surface disturbance and vehicular travel will be limited to the approved location access road.
- **h.** All access roads and surface disturbing activities will conform to the standards outlined in the surface use agreement.
- The operator will be responsible for all maintenance of the access road including drainage structures.

3. Location of Existing Wells:

a. Attached is a map reflecting the one-mile radius of the proposed well.

4. Location of Production Facilities:

- a. All permanent structures will be painted a flat, non-reflective Desert Brown to match the standard environmental colors. All facilities will be painted within six month of installation. Facilities required complying with the Occupational Safety and Health Act (OSHA) may be excluded.
- b. If productive, a gas meter run will be constructed and located on lease within 500 feet of the wellhead. Meter runs will be housed and/or fenced.
- c. If productive, a tank battery will be constructed on this lease, it will be surrounded by a berm of sufficient capacity to contain the storage capacity of the largest tank.
- d. Any necessary pits will be properly fenced to prevent any wildlife and livestock entry.
- **e.** All access roads will be maintained as necessary to prevent erosion and accommodate year-round traffic. The road will be maintained in a safe useable condition.
- f. The site will require periodic maintenance to ensure that drainages are kept open and free of debris, ice, and snow, and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.

5. Location and Type of Water:

 Water for construction and drilling has been obtained through a direct purchase agreement with a third party.

6. Source of Construction Material:

a. If any gravel is used, it will be obtained from a State-approved gravel pit.

7. Methods of Handling Waste Disposal:

- All wastes associated with this application will be contained and disposed of utilizing approved facilities.
- b. Drill cuttings will be contained and buried onsite.
- c. The reserve pit will be located outboard of the location and along the north side of the pad.
- d. The reserve pit will be constructed so as not to leak, break, or allow any discharge.
- e. The reserve pit will be lined with 12-mil minimum thickness plastic nylon-reinforced liner material. The liner will overlay a felt pad only if rock is encountered during excavation. The pit liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit. Pit walls will be sloped no greater than 1:1.5. A minimum 2-foot freeboard will be maintained in the pit at all times during the drilling and completion operation.
- f. The reserve pit has been located in cut material. Three sides of the reserve pit will be fenced before drilling starts. The fourth side will be fenced as soon as drilling is completed, and shall remain until the pit is dry. After the reserve pit has dried, all areas not needed for production will be rehabilitated.
- g. Trash will be contained in a trash cage and hauled away to an approved disposal site as necessary but no later than at the completion of drilling operations. The contents of the trash container will be hauled off periodically to the approved Uintah County Landfill near Vernal, Utah.
- h. Produced fluids from the well other than water will be produced into a test tank until such time as construction of production facilities is completed. Any spills of oil, gas, saltwater or other produced fluids will be cleaned up and removed.

- i. Any salts and/or chemicals, which are an integral part of the drilling system, will be disposed of in the same manner as the drilling fluid.
- j. Sanitary facilities will be onsite at all times during operations. Sewage will be placed in a portable chemical toilet and the toilet replaced periodically utilizing a licensed contractor to transport by truck the portable chemical toilet so that its contents can be delivered to the Vernal Wastewater Treatment Facility in accordance with State and County regulations.

8. Ancillary Facilities:

a. Garbage containers and portable toilets are the only ancillary facilities proposed in this application.

9. Well Site Layout:

- a. The well will be properly identified in accordance with State regulations.
- b. Access to the well pad will be from the north northwest.
- c. The pad and road designs are consistent with State specifications.
- **d.** A pre-construction meeting with responsible company representative, contractors, the Utah Division of Oil, Gas and Mining, and other persons associated with the management or construction of the well site will be conducted at the project site prior to commencement of surface-disturbing activities. The pad and road will be construction-staked prior to this meeting.
- **e.** The pad has been staked at its maximum size; however, it will be constructed smaller if possible, depending upon rig availability. Should the layout change, this application will be amended and approved utilizing a sundry notice.
- f. All surface disturbing activities will be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specification in the approved plans.
- **q.** All cut and fill slopes will be such that stability can be maintained for the life of the activity.
- h. The site surface will be graded to drain away from the pit to avoid pit spillage during large storm events.
- i. The stockpiled topsoil (first 6 inches or maximum available) will be stored in a window on the uphill side of the location to prevent any possible contamination. All topsoil will be stockpiled for reclamation in such a way as to prevent soil loss and contamination.
- j. Pits will remain fenced until site cleanup.
- k. The blooie line will be located at least 100 feet from the well head.
- I. Water injection may be implemented if necessary to minimize the amount of fugitive dust.

10. Plans for Restoration of the Surface:

- **a.** Site reclamation for a producing well will be accomplished for portions of the site not required for the continued operation of the well.
- **b.** The Operator will control noxious weeds along access road use authorizations, well sites, or other applicable facilities by spraying or mechanical removal. A list of noxious weeds may be obtained from the Utah Division of Oil, Gas and Mining or the appropriate County Extension Office.
- c. Upon well completion, any hydrocarbons in the pit shall be removed. Once the reserve pit is dry, the plastic nylon-reinforced liner shall be torn and perforated before backfilling of the reserve pit. The reserve pit and that portion of the location not needed for production facilities/operations will be re-contoured to the approximate natural contours.
- d. The cut and fill slopes and all other disturbed areas not needed for the production operation will be top soiled and re-vegetated. The stockpiled topsoil will be evenly distributed over the disturbed area.
- e. Prior to reseeding the site, all disturbed areas, including the access road, will be scarified and left with a rough surface. The site will then be seeded and/or planted as prescribed by the landowner.

11. Surface and Mineral Ownership:

a. Surface Ownership:

Pelican Lake Farms, LLC, P.O. Box 833, Meeker, Colorado 81641, (970) 878-3420

b. Mineral Ownership:

Mike Kelly, P.O. Box 219, Glendale, Oregon 97442
Gary Kelly, 256 Cordelia Street, Myrtle Creek, Oregon 97457
James Harvey Jordan, P.O. Box 983, Albany, Oregon 97321
Mary Edna Jordan, P.O. Box 810, Poplarville, MS 39470
Martha Jordan Boright, P.O. Box 7377, Bonnie Lake, Washington 98390
Norma E. Stroud, 504 Orange Street, Arlington, Texas 76012
Jan Rhodes, 2037 Shasta Street, Mojave, California 93501
Wendy Sue Pack, P.O. Box 1068, Bluefield, Virginia 24605
Marabeth Harner, 97 Towne Square Drive, Newport, Virginia 23607
Nyleen McSorley, 1537 Marble Court, Chula Vista, California 91911

12. Other Information:

a. A fee surface damage agreement with Pelican Lake Farms, LLC is attached.

13. Operator's Representative and Certification:

I hereby certify that I, or person under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated with operations herein will be performed by *(construction contractor has not been determined)*, and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Name and Title

Anna Ilhan

Operations Engineer

STATE OF COLORADO

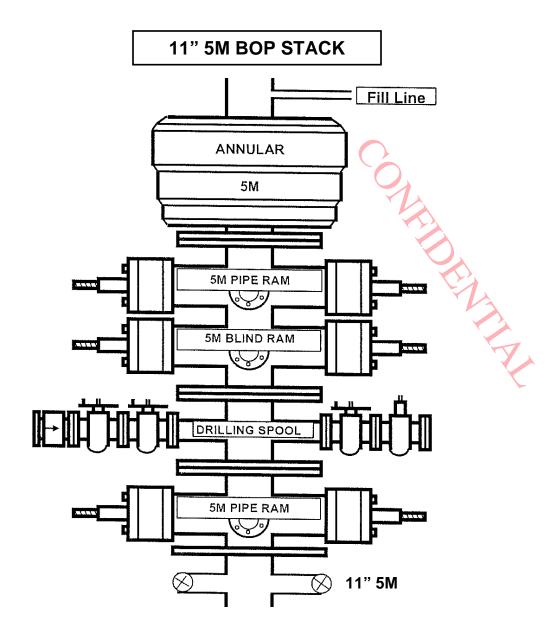
COUNTY OF DENVER

Subscribed and sworn to before me this 24th day of September, 2010.

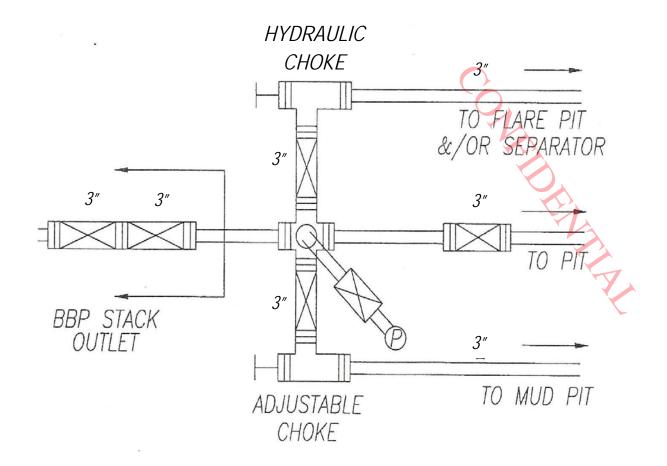
My commission Expires:

Notary Public

TYPICAL BLOWOUT PREVENTER ROTARY



CHOKE MANIFOLD



September 28, 2010

Ms. Diana Mason State of Utah Division of Oil, Gas & Mining P.O. Box 145801 Salt Lake City, UT 84114-5801

RE:

Directional Drilling R649-3-11

Pelican Lake 16-12-7-20

Section 16, T7S - R20E, Uintah County, Utah

Surface Location:

1204' FNL, 2220' FWL

Bottomhole Location: 660' FNL, 1980' FWL

Dear Ms. Mason.

Pursuant to the filing of Elk Resources' Application for Permit to Drill regarding the above referenced well on September 27, 2010, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Elk Resources Pelican Lake 16-12-7-20 well is located within the existing Aurora (Deep) Unit Area.
- Elk Resources is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the proposed surface location and directionally drilling from this location, Elk Resources will be able to minimize the affect on the surface owner's farming activities.
- Furthermore, Elk Resources hereby certifies that the working interest owners for this well, Elk Resources, EnCana Oil & Gas, and Forest Oil Corporation, are the sole working interest owners within a 460 foot radius of the entire directional wellbore. All three partners have consented to this well being drilled directionally.

Therefore, based on the above stated information, Elk Resources requests the permit be granted pursuant to R649-3-11.

Thank you,

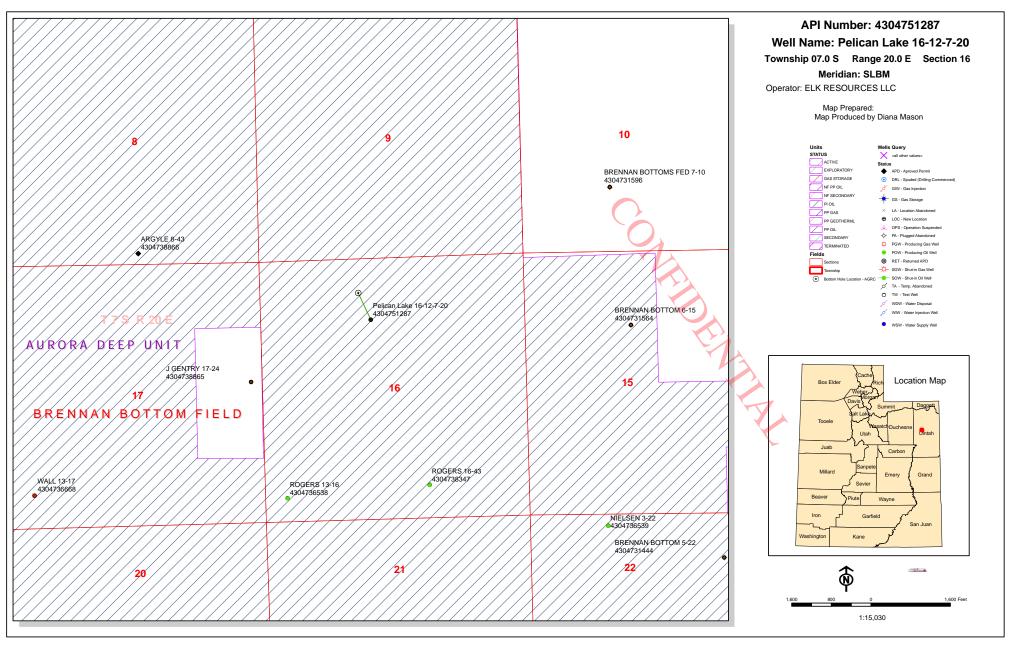
Merrell Olsen

Engineer I

molsen@delekenergyus.com

Jerrell Ols

303-339-1919



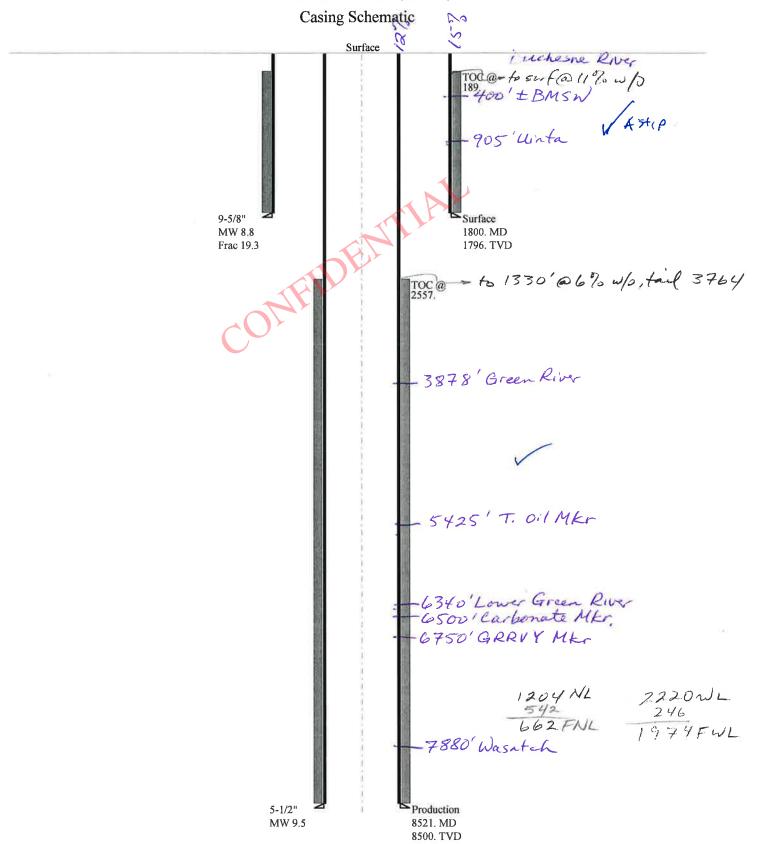
BOPE REVIEW ELK RESOURCES, LLC Pelican Lake 16-12-7-20 43047512870000

*Max Pressure Allowed @ Previous Casing Shoe=

Well Name		ELK RESOURC	CES	S, LLC Pelican Lake 1	6-12-7-20 4304	7512	870000				
String		Cond	T	Surf	Prod	T					
Casing Size(")		13.375	1	9.625	5.500	Ī					
Setting Depth (TVD)		75	7	1800	3521	Ī					
Previous Shoe Setting Dept	th (TVD)	0	7	75	1800	Ī					
Max Mud Weight (ppg)		8.3	1	8.8	0.5	Ī					
BOPE Proposed (psi)		0	1	5000	5000	Ī					
Casing Internal Yield (psi)		1725	1	3520	740	Ī					
Operators Max Anticipated	d Pressure (psi)	4250			9.6	[
Calculations	Con	nd String	_		13.3	375	"		_		
Max BHP (psi)		.052*Set	tiı	ng Depth*MW	32	Í					
					3		BOPE Ade	equate For Drilling And Setting Casing at Dep	th?		
MASP (Gas) (psi)	Ma	x BHP-(0.12	2*	Setting Depth)	23		NO				
MASP (Gas/Mud) (psi)	Ma	x BHP-(0.22	2*	Setting Depth)	16		NO	ОК			
			~				*Can Full	Expected Pressure Be Held At Previous Shoe?			
Pressure At Previous Shoe	Max BHP22*(Setting Γ	Pepth - Previo	οι	s Shoe Depth)	16		NO	ОК			
Required Casing/BOPE Te	est Pressure=	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			75		psi				
*Max Pressure Allowed @	Previous Casing Shoe=				0		psi *Ass	*Assumes 1psi/ft frac gradient			
Calculations	Sui	f String	_		9.6	525	"		_		
Max BHP (psi)		.052*Set	tiı	ng Depth*MW	824						
							BOPE Ade	equate For Drilling And Setting Casing at Dep	th?		
MASP (Gas) (psi)	Ma	x BHP-(0.12	2*	Setting Depth)	608		YES				
MASP (Gas/Mud) (psi)	Ma	x BHP-(0.22	2*	Setting Depth)	428		YES	ОК			
							*Can Full	Expected Pressure Be Held At Previous Shoe?			
Pressure At Previous Shoe	Max BHP22*(Setting Γ	Depth - Previo	οι	s Shoe Depth)	445		NO	Reasonable depth, no expected pressures			
Required Casing/BOPE Te	est Pressure=				1800		psi				
*Max Pressure Allowed @	Previous Casing Shoe=				75		psi *Assumes 1psi/ft frac gradient				
Calculations	Pro	d String	_		5.5	500	"				
Max BHP (psi)		.052*Set	tiı	ng Depth*MW	4209						
			_				BOPE Ade	equate For Drilling And Setting Casing at Dep	th?		
MASP (Gas) (psi)	Ma	x BHP-(0.12	2*	Setting Depth)	3186		YES				
MASP (Gas/Mud) (psi)	Ma	x BHP-(0.22	2*	Setting Depth)	2334		YES	ОК			
							*Can Full	Expected Pressure Be Held At Previous Shoe?			
Pressure At Previous Shoe	Max BHP22*(Setting Γ	Pepth - Previo	οι	s Shoe Depth)	2730		NO	Reasonable			
Required Casing/BOPE Te	st Pressure=				5000		psi				
*Max Pressure Allowed @	Previous Casing Shoe=				1800		psi *Ass	umes 1psi/ft frac gradient			
Calculations		String	_			_	"		_		
Max BHP (psi)		.052*Set	tiı	ng Depth*MW							
							BOPE Ade	equate For Drilling And Setting Casing at Dep	th?		
MASP (Gas) (psi)	Ma	x BHP-(0.12	2*	Setting Depth)			NO				
MASP (Gas/Mud) (psi)	Ma	x BHP-(0.22	2*	Setting Depth)			NO				
							*Can Full	Expected Pressure Be Held At Previous Shoe?			
Pressure At Previous Shoe	Max BHP22*(Setting I	Depth - Previo	οι	s Shoe Depth)			NO				
Required Casing/ROPE Te	st Prossure=					=	nsi				

*Assumes 1psi/ft frac gradient

43047512870000 Pelican Lake 16-12-7-20



Well name:

43047512870000 Pelican Lake 16-12-7-20

Operator:

ELK RESOURCES, LLC

String type:

Surface

Project ID:

43-047-51287

Location:

Collapse

UINTAH

Design is based on evacuated pipe.

COUNTY

8.800 ppg

Minimum design factors: **Environment:**

Collapse:

Design factor

1.125

H2S considered?

Surface temperature:

No 74 °F

Bottom hole temperature: Temperature gradient:

99 °F 1.40 °F/100ft

Minimum section length: 1,000 ft

Burst:

Design factor

Cement top:

189 ft

Burst

Max anticipated surface

pressure: Internal gradient:

Design parameters:

Mud weight:

1,580 psi 0.120 psi/ft

Calculated BHP 1,796 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J) 8 Round LTC: 1.80 (J) Buttress: 1.60 (J)

Premium: 1.50 (J) 1.60 (B) Body yield:

Tension is based on air weight. Neutral point: 1,566 ft Directional Info - Build & Hold

Kick-off point 100 ft Departure at shoe: 114 ft Maximum dogleg: 2 °/100ft

Inclination at shoe: 4.1

Re subsequent strings: Next setting depth: 8,500 ft Next mud weight: 9.500 ppg Next setting BHP: 4,195 psi

Fracture mud wt: Fracture depth: Injection pressure: 19.250 ppg 1,796 ft 1,796 psi

Run	Segment		Nominal		End	True Vert	Measured	Drift	Est.
Seq	Length (ft)	Size (in)	Weight (lbs/ft)	Grade	Finish	Depth (ft)	Depth (ft)	Diameter (in)	Cost (\$)
1	1800	9.625	36.00	J-55	LT&C	1796	1800	8.796	14719
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(kips)	(kips)	Factor
1	821	2020	2.460	1796	3520	1.96	64.7	453	7.01 J

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: November 16,2010 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 1796 ft, a mud weight of 8.8 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Well name:

43047512870000 Pelican Lake 16-12-7-20

Minimum design factors:

Operator:

ELK RESOURCES, LLC

String type:

Production

Project ID:

43-047-51287

Location:

UINTAH

COUNTY

Environment:

Design parameters: **Collapse**

Mud weight:

Collapse: Design factor

H2S considered? Surface temperature: No 74 °F

9.500 ppg Design is based on evacuated pipe.

1.125

Bottom hole temperature:

193 °F

Temperature gradient: Minimum section length: 1,000 ft

1.40 °F/100ft

Burst:

Design factor

Cement top:

2,557 ft

Burst

Max anticipated surface

pressure: Internal gradient:

2,325 psi 0.220 psi/ft

Calculated BHP

4,195 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J) 1.80 (J) 8 Round LTC: 1.60 (J) Buttress:

Premium:

1.50 (J) Body yield: 1.60 (B) Directional Info - Build & Hold

Kick-off point Departure at shoe:

100 ft 595 ft

Maximum dogleg: Inclination at shoe:

2 °/100ft 4.1°

Tension is based on air weight. Neutral point: 7,293 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	8521	5.5	17.00	N-80	LT&C	8500	8521	4.767	48028
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	4195	6290	1.500	4195	7740	1.85	144.5	348	2.41 J

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: November 16,2010 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 8500 ft, a mud weight of 9.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator ELK RESOURCES LLC
Well Name Pelican Lake 16-12-7-20

API Number 43047512870000 APD No 3021 Field/Unit UNDESIGNATED

Location: 1/4,1/4 NENW **Sec** 16 **Tw** 7.0S **Rng** 20.0E 1204 FNL 2220 FWL **GPS Coord (UTM)** 612710 4452222 **Surface Owner** Pelican Lake Farms, LLC

Participants

See Comments

Regional/Local Setting & Topography

The general location is in the north end of Ouray Park and north of Pelican Lake. The general area is characterized by a long valley extending from the hills which form an elevated bench to the north, south to the Green River. Much of the area is used for agricultural lands irrigated with sprinkler systems. Vernal, Utah is approximately 20 air miles and 21.4 road miles to the northeast. Access is by State of Utah Highways. Approximately 0.1 mile of new road across private land will be constructed.

The proposed location for the Pelican Lake 16-12-7-20 oil well is on private land located immediately south of the paved highway. The highway is straight for a short distance which has been used to locate a potentially dangerous approach or departure to the well site. A wide approach off the south side of the highway is planned. The pad will be located in the northeast end of an alfalfa field which is irrigated by a wheel-line system. The terrain is a moderately gentle slope and leads away from the elevated hills to the north then extend southerly into more gentle flats. A gentle swale intersects through the east part of the site. It will be filled. No diversions around the pad are needed. The surface soils are a sandy silty loam. Elk will add road base to the access road and location as needed to harden the surface and reduce the dust. Maximum cut is 10.1 feet at Pit Corner A and maximum fill is 9.2 feet at Location Corner 9. This corner has been rounded to reduce the fill required. A fence borders the site on the north below the highway fence and forms a lane for cattle to access a water trough. This watering facility will be relocated. No springs, streams or open water is in the immediate area. Also a fence intersects the southeast portion of the pad. It will be relocated. Pelican Lake is about \(^{3}\)4 mile to the south. Mr. Bryce Perkey, surface owner and owner of the Pelican Lake Ranches was present. He stated that he is not in favor of the well but felt that Elk has done the best they could and is in agreement to the location they have proposed and the other items contained in the signed Surface Use Agreement. The minerals are also private, owned by another party. The well location is outside the normal drilling window. It will be directionally drilled with the bottom hole location to the north under a steep hillside.

Surface Use Plan

Current Surface Use

Grazing Agricultural Wildlfe Habitat Residential

New Road
Miles

Well Pad

Src Const Material

Surface Formation

0.1 Width 355 Length 400 Onsite UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

11/23/2010 Page 1

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Livestock occasionally graze the area during the non-crop season. Prairie dogs are common; coyotes, small mammals and birds may be present.

FIDENTIAL

Most of the site is occupied by alfalfa.

Soil Type and Characteristics

Deep sandy silty loam

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required? N

Berm Required? Y

Erosion Sedimentation Control Required? N

Paleo Survey Run? N Paleo Potental Observed? N Cultural Survey Run? N Cultural Resources?

Reserve Pit

Site-Specific Factors	Site Ra	nking	
Distance to Groundwater (feet)	25 to 75	15	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)	>1320	0	
Native Soil Type	Mod permeability	10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)		0	
Affected Populations			
Presence Nearby Utility Conduits	Not Present	0	
	Final Score	30	1 Sensitivity Level

Characteristics / Requirements

A 100' x 225' x 10' deep reserve pit will be constructed within a cut on the north west side of the location. It will be lined with a 16-mil liner. Because of the nature of the soils a felt sub- liner may not be needed.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 16 Pit Underlayment Required? Y

Other Observations / Comments

Floyd Bartlett (DOGM), Bryce Perkey (Pelican Lake Ranches-Surface Owner), Craig Parker (Elk Resources, LLC), Terra Miller and Jenifer Hall (Land Pro.), Marsha Perry (Uintah County Planning and Zoning), Billy McClure (LaRose Construction) and Gary Robinson (Robinson Construction).

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Floyd Bartlett 10/14/2010 **Evaluator Date / Time**

CONFIDENTIAL

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11/23/2010

Application for Permit to Drill Statement of Basis

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
3021	43047512870000	LOCKED	OW	P	No
Operator	ELK RESOURCES LLC		Surface Owner-APD	Pelican Lake Farr	ms, LLC
Well Name	Pelican Lake 16-12-7-20		Unit	AURORA (DEE	P)
Field	UNDESIGNATED		Type of Work	DRILL	

Location NENW 16 7S 20E S 1204 FNL 2220 FWL GPS Coord (UTM) 612712E 4452215N

Geologic Statement of Basis

Elk proposes to set 1,800 feet of surface pipe, cemented to surface. The depth to the base of the moderately saline water at this location is estimated to be at approximately 400 feet. A search of Division of Water Rights records shows 9 water wells within a 10,000 foot radius of the proposed location. The nearest well is more than 1/2 mile from the proposed locationwith a depth of 47 feet. Wells in the area are listed for domestic use, irrigation, oil field use and stock watering. Depths of the wells ranges from 16 to 300 feet. Listed wells probably produce from alluvial sediments and the Uinta Formation. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Wells in the alluvial sediments are probably a more significant source of ground water. The proposed casing and cement should adequately protect any useable ground water.

Brad Hill 11/1/2010
APD Evaluator Date / Time

Surface Statement of Basis

The general location is in the north end of Ouray Park and north of Pelican Lake. The general area is characterized by a long valley extending from the hills which form an elevated bench to the north, south to the Green River. Much of the area is used for agricultural lands irrigated with sprinkler systems. Vernal, Utah is approximately 20 air miles and 21.4 road miles to the northeast. Access is by State of Utah Highways. Approximately 0.1 mile of new road across private land will be constructed.

The proposed location for the Pelican Lake 16-12-7-20 oil well is on private land located immediately south of the paved highway. The highway is straight for a short distance which has been used to locate a potentially dangerous approach or departure to the well site. A wide approach off the south side of the highway is planned. The pad will be located in the northeast end of an alfalfa field which is irrigated by a wheel-line system. The terrain is a moderately gentle slope and leads away from the elevated hills to the north then extend southerly into more gentle flats. A gentle swale intersects through the east part of the site. It will be filled. No diversions around the pad are needed. The surface soils are a sandy silty loam. Elk will add road base to the access road and location as needed to harden the surface and reduce the dust. Maximum cut is 10.1 feet at Pit Corner A and maximum fill is 9.2 feet at Location Corner 9. This corner has been rounded to reduce the fill required. A fence borders the site on the north below the highway fence and forms a lane for cattle to access a water trough. This watering facility will be relocated. No springs, streams or open water is in the immediate area. Also a fence intersects the southeast portion of the pad. It will be relocated. Pelican Lake is about \(^{3}\)4 mile to the south. Mr. Bryce Perkey, surface owner and owner of the Pelican Lake Ranches was present. He stated that he is not in favor of the well but felt that Elk has done the best they could and is in agreement to the location they have proposed and the other items contained in the signed Surface Use Agreement. The minerals are also private, owned by another party. The well location is outside the normal drilling window. It will be directionally drilled with the bottom hole location to the north under a steep hillside.

Uintah County has recently passed an extraction and excavation ordinance responding to concerns received

11/23/2010

Application for Permit to Drill Statement of Basis

Utah Division of Oil, Gas and Mining

Page 2

from a few citizens regarding disturbances related to oil wells, related facilities and gravel borrow sites. Among other items, this ordinance prohibits well pads within 1,000 feet of residences. Facilities can not materially interfere with the irrigation of crop lands and operational dust must be controlled. Marsha Perry from the Planning and Zoning office was present. She explained important requirements of the ordinances to those present. A dwelling used as a part time residence for Leon and Rose Hill is located north of the highway about 800 feet from the site. Elk Resources is required to submit an application to the Planning and Zoning Commission to be reviewed by the Board. The next meeting of the Board is not until Nov 16.

Floyd Bartlett 10/14/2010
Onsite Evaluator Date / Time

Conditions of Approval / Application for Permit to Drill

Category Condition

Pits A synthetic liner with a minimum thickness of 16 mils with a felt subliner as needed, shall be properly installed and

maintained in the reserve pit

Surface The well site shall be berned to prevent fluids from leaving the pad.

Surface The reserve pit shall be fenced upon completion of drilling operations.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 9/27/2010 API NO. ASSIGNED: 43047512870000

WELL NAME: Pelican Lake 16-12-7-20

OPERATOR: ELK RESOURCES, LLC (N3480) **PHONE NUMBER:** 303 339-1919

CONTACT: Merrell Olsen

PROPOSED LOCATION: NENW 16 070S 200E Permit Tech Review:

> SURFACE: 1204 FNL 2220 FWL **Engineering Review:**

> **BOTTOM:** 0660 FNL 1980 FWL Geology Review:

COUNTY: UINTAH

LATITUDE: 40.21467 LONGITUDE: -109.67546 **UTM SURF EASTINGS: 612712.00** NORTHINGS: 4452215.00

FIELD NAME: UNDESIGNATED

LEASE TYPE: 4 - Fee

LEASE NUMBER: Patent PROPOSED PRODUCING FORMATION(S): WASATCH

SURFACE OWNER: 4 - Fee COALBED METHANE: NO

RECEIVED AND/OR REVIEWED: LOCATION AND SITING:

 PLAT R649-2-3.

Unit: AURORA (DEEP) Bond: STATE/FEE - B000969

Potash R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

Oil Shale 190-13 **Drilling Unit**

Board Cause No: R649-3-11 Water Permit: MUNICIPAL

Effective Date: RDCC Review:

✓ Fee Surface Agreement Siting:

✓ Intent to Commingle R649-3-11. Directional Drill

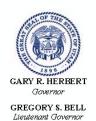
Commingling Approved

Presite Completed Comments: APD IS IN UPOD:

Stipulations: 5 - Statement of Basis - bhill

14 - Commingling Temporary Denial - ddoucet 15 - Directional - dmason 23 - Spacing - dmason 25 - Surface Casing - hmacdonald

API Well No: 43047512870000



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Pelican Lake 16-12-7-20

API Well Number: 43047512870000

Lease Number: Patent

Surface Owner: FEE (PRIVATE) **Approval Date:** 11/23/2010

Issued to:

ELK RESOURCES, LLC, 1401 17th Street, Suite 700, Denver, CO 80202

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-11. The expected producing formation or pool is the WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Surface casing shall be cemented to the surface.

API Well No: 43047512870000

Downhole commingling between formations cannot occur until the provisions of Rule R649-3-22, Completion Into Two or More Pools, have been met.

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan contact Dustin Doucet
- Significant plug back of the well contact Dustin Doucet
- Plug and abandonment of the well contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well contact Carol Daniels OR
- submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to cementing or testing casing contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 office
- Dustin Doucet 801-538-5281 office

801-733-0983 - after office hours

• Dan Jarvis 801-538-5338 - office

801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Annuared Dree

API Well No: 43047512870000

Approved by:

For John Rogers Associate Director, Oil & Gas

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET (for state use only)

_]	<u>ROUTIN</u>	\mathbf{G}
	1. DJJ	
⊢		

X - Change of Operator (Well Sold)

A - Change of Operator (Well Sold)	Operator Name Change/Merger							
The operator of the well(s) listed below has changed,	1/1/2011							
FROM: (Old Operator):				TO: (New O	perator):			
N3480-Elk Resources LLC.				N2165-Bill Bar		ation		
1401 17th Street, Suite 700					8th St, Suite			
Denver, CO 80202					r, CO 8020			
Phone: 1 (202) 206 4505				DI 1 (200)	010 0101			
Phone: 1 (303) 296-4505				Phone: 1 (303)	312-8134			
WELL NAME	lon o	TRV I		Unit:	T=======	AURORA	`	
WELL NAME	SEC	TWN	RNG	API NO	ENTITY	LEASE TYPE	WELL	WELL
SEE ATTACHED LIST - 9 WELLS		1			NO		TYPE	STATUS
SEE THI THORIDE BIST - 7 WEELS								
OPERATOR CHANGES DOCUMENTATI Enter date after each listed item is completed 1. (R649-8-10) Sundry or legal documentation was rece 2. (R649-8-10) Sundry or legal documentation was rece 3. The new company was checked on the Department	eived eived	from tl	ne NEV	V operator on:		7/11/2011 7/11/2011 abase on:		7/14/2011
4a. Is the new operator registered in the State of Utah:			E	Business Numbe	r:	5239043-0143	•	
5a. (R649-9-2)Waste Management Plan has been receive	d on:			IN PLACE				
5b. Inspections of LA PA state/fee well sites complete o	n:			n/a	•			
5c. Reports current for Production/Disposition & Sundri				ok	•			
6. Federal and Indian Lease Wells: The BLM and			has an		er name ch	ange		
or operator change for all wells listed on Federal or I				proved the merg	BLM	not yet	BIA	n/a
7. Federal and Indian Units:		rouses	on.		DUN	. Hot yet	DIA	II/a
The BLM or BIA has approved the successor of ur	it ope	erator f	or wells	s listed on:		not yet		
8. Federal and Indian Communization Agreem	ents	("CA	"):					
The BLM or BIA has approved the operator for all	wells	slisted	within	a CA on:		n/a		
9. Underground Injection Control ("UIC") approved UIC Form 5, Transfer of Authority to								
Inject, for the enhanced/secondary recovery unit/pro	ject f	or the v	water di	sposal well(s) li	isted on:	-	n/a	
DATA ENTRY:				= /4 . / 5				
1. Changes entered in the Oil and Gas Database on:	~	,		7/14/2011		=/4.4/0.44		
2. Changes have been entered on the Monthly Operate3. Bond information entered in RBDMS on:	or Ch	ange S	pread			7/14/2011		
 Fee/State wells attached to bond in RBDMS on: 				7/14/2011 7/14/2011				
5. Injection Projects to new operator in RBDMS on:				n/a				
6. Receipt of Acceptance of Drilling Procedures for AP	D/Ne	w on:		117 tt	7/14/2011			
BOND VERIFICATION:								
1. Federal well(s) covered by Bond Number:				WYB000040				
2. Indian well(s) covered by Bond Number:								
3a. (R649-3-1) The NEW operator of any state/fee well	l(s) lis	sted co	vered b	y Bond Number	•	LPM4138148		
3b. The FORMER operator has requested a release of li	-	-	their bo	ond on:	not yet			
LEASE INTEREST OWNER NOTIFICATION OF A COLUMN ACCOUNTS OF A COLUMN ACCOU					_			
4. (R649-2-10) The NEW operator of the fee wells has be of their responsibility to notify all interest owners of the second of	een c his ch	ontacte lange o	ed and i n:		tter from the 7/14/2011	e Division		
COMMENTS:						· · · · · · · · · · · · · · · · · · ·		
OCITITIE IT I U.								

	STATE OF UTAH		FORM 9
	DIVISION OF OIL, GAS AND M		5. LEASE DESIGNATION AND SERIAL NUMBER:
SUNDR	Y NOTICES AND REPORT	S ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
Do not use this form for proposals to drill	new wells, significantly deepen existing wells below cu laterals. Use APPLICATION FOR PERMIT TO DRILL	rrent bottom-hole depth, reenter plugged wells, or to form for such proposals.	7. UNIT or CA AGREEMENT NAME: Aurora (Deep) Unit
1. TYPE OF WELL OIL WELL			8. WELL NAME and NUMBER:
2. NAME OF OPERATOR:	1/2/02		9. API NUMBER:
Elk Resources, LLC	N 3480	PHONE NUMBER:	10. FIELD AND POOL, OR WILDCAT:
3. ADDRESS OF OPERATOR: 1401 17th Street, Suite 700 CI	TY Denver STATE CO ZIE		III. TILLE AND TOOL, GROVEDSAT.
4. LOCATION OF WELL FOOTAGES AT SURFACE:			соинту: Uintah
QTR/QTR, SECTION, TOWNSHIP, RA	NGE, MERIDIAN: 7S 7	20E S	STATE: UTAH
11. CHECK APP	PROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPO	ORT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION
(Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start	CASING REPAIR	NEW CONSTRUCTION	THOMOS REPAIR
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE PLUG AND ABANDON	TUBING REPAIR VENT OR FLARE
SUBSEQUENT REPORT	CHANGE TUBING	PLUG BACK	WATER DISPOSAL
(Submit Original Form Only)	CHANGE WELL NAME CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF
Date of work completion:	COMMINGLE PRODUCING FORMATIONS		OTHER:
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION	
12. DESCRIBE PROPOSED OR (COMPLETED OPERATIONS. Clearly show all	pertinent details including dates, depths, volum	nes, etc.
	"Transfer of APD" forms and list		i.
Previous Operator: Elk Resources, LLC 1401 17th Street, Suite 7 Denver, Colorado 80202 303-296-4505 Utah DOGM Bond # B00 BLM Bond # B000971		New Operator: N 2/63 Bill Barrett Corporation 1099 18th Street, Suite 2300 Denver, Colorado 80202 303-293-9100 Utah DOGM Bond # WYB 0000 BLM Bond # LPM 4138148	
Bill Barrett Corp. Representat NAME (PLEASE PRINT) SIGNATURE	ive: Huntington T walk	TITLE Sr. VP-	
NAME (PLEASE PRINT) John Wh	iisler	TITLE CEO	
SIGNATURE John Wha	<u>li</u>	DATE 6/8/1	<u> </u>
(This space for State use only)	a /		RECEIVED

APPROVED 7/14/30/1

Carleve Russell (See Division of Oil, Gas and Mining Earlene Russell, Engineering Technician

(See Instructions on Reverse Side)

JUL 1 1 2011

DIV. OF OIL, GAS & MINING

(5/2000)

ELK RESOURCES, LLC (N3480) to BILL BARRETT CORPORATION (N2165) effective January 1, 2011

well_name	sec	twp	rng	api	entity	Lease	well	stat	conf	unit	lease no	7000
ROGERS 13-16	16	070S	200E	4304736538	14989		OW			AURORA (DEEP)		zone
NIELSEN 3-22	22	070S	200E	4304736539	14806		OW					GR-WS
WALL 13-17	17	070S		4304736668	15363					AURORA (DEEP)		GRRV
ROGERS 16-43	16			4304738347	16977					AURORA (DEEP)		BLKHK
AURORA FED 5-32		070S		4304738463			OW			AURORA (DEEP)		GR-WS
AURORA FED 26-33					-					AURORA (DEEP)		GR-WS
FOUR STAR 7-32-7-20		070S		4304738468		Federal				AURORA (DEEP)	UTU-80689	GRRV
		070S		4304751285	17881	Fee	OW	P	C	AURORA (DEEP)	Patent	WSTC
PELICAN LAKE 16-12-7-20		070S		4304751287		Fee	OW	APD		AURORA (DEEP)		
ARGYLE 8-43	08	070S	200E	4304751509		Fee	OW	APD		AURORA (DEEP)		

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

Request to Transfer Application or Permit to Drill

	- I toquot to	ransier Application of Permit to L	71111
	(This form should a	company a Sundry Notice, Form 9, requesting APD tra	ınsfer)
Well	name:	Pelican Lake 16-12-7-20	
API	number:	43047512870000	
Loca	ation:	Qtr-Qtr: NENW Section: 16 Towns	ship: 7S Range: 20E
Com	pany that filed original application:	Elk Production, LLC	•
Date	original permit was issued:	11/23/2010	
Com	pany that permit was issued to:	Elk Production, LLC	
Check one		Desired Action:	
	A CALLES		
	Transfer pending (unapproved) App	ication for Permit to Drill to new operato	Γ
	submitted in the pending Application for	phts to drill on the property, hereby verifies Permit to Drill, remains valid and does not prees to the information and procedures as	require revision. The new
✓	Transfer approved Application for P		
	The undersigned as owner with legal r	this to drill on the property as permitted, he by approved application to drill, remains val	reby verifies that the id and does not require
	owing is a checklist of some items related on private land, has the ownership	ted to the application, which should be v	-
	If so, has the surface agreement been		
Have		e proposed well which would affect the spa	oine os citios
requi	rements for this location?		
Have propo	there been any unit or other agreement osed well?	put in place that could affect the permitting	or operation of this
Have propo	there been any changes to the access osed location?	oute including ownership or right-of-way, wh	ich could affect the
Has t	he approved source of water for drilling	hanged?	1
Have plans	there been any physical changes to the from what was discussed at the onsite of	surface location or access route which will r valuation?	equire a change in
Is bor	nding still in place, which covers this pro	osed well? Bond No. <u>LPM 4138</u>	148
snoule	lesired or necessary changes to either a d be filed on a Sundry Notice, Form 9, o ssary supporting information as required	pending or approved Application for Permit amended Application for Permit to Drill, Fo	to Drill that is being transferred, m 3, as appropriate, with
Signa		Title Regulatory Manager Date 7/10/11	
.√ehi e	senting (company natole) <u> </u>	MAKE TO CON POPO TO COL	

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator of the Application for Permit to Drill.

(3/2004)

JUL 1 2 2011

From: Venessa Langmacher <vlangmacher@billbarrettcorp.com>

To: "Coulthard, Michael L" <mcoultha@blm.gov>

CC: Diana Mason <dianawhitney@utah.gov>, "Hansen, Robin L" <robinhansen@blm....

Date: 10/31/2011 8:03 AM

Subject: RE: New APD for BILL BARRETT CORP 43-047-52129 Aurora 3-16D-7-20

The recently submitted Aurora 3-16D-7-20 replaces the previously approved Pelican Lake 16-12-7-20. We are requesting that the Pelican Lake 16-12-7-20 APD be rescinded.

Thanks,

Venessa Langmacher Senior Permit Analyst

BILL BARRETT CORPORATION
1099 18th Street | Suite 2300
Denver, CO 80202
D 303.312.8172 | F 303.291.0420
vlangmacher@billbarrettcorp.com
www.billbarrettcorp.com

----Original Message-----

From: Coulthard, Michael L [mailto:mcoultha@blm.gov]

Sent: Friday, October 28, 2011 12:49 PM

To: Venessa Langmacher

Cc: Diana Mason; Hansen, Robin L; Lee, Michael

Subject: New APD for BILL BARRETT CORP 43-047-52129 Aurora 3-16D-7-20

Hi Venessa,

I just left you a voice mail about this well. You currently already have a well permitted with a bottom hole location very close to this one.

It is the:

43-047-51287 BILL BARRETT CORP PELICAN LAKE 16-12-7-20 Approved permit (APD); not yet spudded

Oil Well UINTAH NENW 16 7S-20E 1204 N 2220 W Directional

I just wanted to confirm that it is BBC's intent to have this APD rescinded.

Thank you,

Mickey

Michael L. Coulthard Petroleum Engineer Bureau of Land Management Phone (801) 539-4042 Fax (801) 539-4261

----Original Message-----

From: Diana Mason [mailto:DIANAWHITNEY@utah.gov]

Sent: Friday, October 28, 2011 10:27 AM

To: Coulthard, Michael L

Cc: Lee, Michael; Hansen, Robin L

Subject: RE: New APD for BILL BARRETT CORP UNIT: AURORA (DEEP)

Hi Mickey,

I haven't heard anything about Bill Barrett wanting this APD to be rescinded.

Thank you, Diana

>>> "Coulthard, Michael L" <mcoultha@blm.gov> 10/28/2011 9:42 AM >>> Hi Diana.

Is BBC requesting to have the following APD rescinded?

43-047-51287 BILL BARRETT CORP PELICAN LAKE 16-12-7-20 Approved permit (APD); not yet spudded

Oil Well UINTAH NENW 16 7S-20E 1204 N 2220 W Directional

Thank you,

Mickey

Michael L. Coulthard Petroleum Engineer Bureau of Land Management Phone (801) 539-4042 Fax (801) 539-4261

----Original Message-----

From: dianawhitney@utah.gov [mailto:dianawhitney@utah.gov]

Sent: Wednesday, October 26, 2011 3:36 PM

To: Coulthard, Michael L Cc: dianawhitney@utah.gov

Subject: New APD for BILL BARRETT CORP UNIT: AURORA (DEEP)

43-047-52129 Aurora 3-16D-7-20

Surface: Sec. 16 T. 7S R. 20E 1585 FNL 2573 FWL Bottom: Sec. 16 T. 7S R. 20E 991 FNL 2204 FWL

Link (PDF): http://oilgas.ogm.utah.gov/apd/attachments/4826/complete.pdf

Thank you, Diana



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

September 23, 2011

Bill Barrett Corporation 1099 18th Street, Ste. 2300 Denver, CO 80202

Re:

APD Rescinded – Pelican Lake 16-12-7-20, Sec. 16 T. 7S, R. 20E

Uintah County, Utah API No. 43-047-51287

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on November 23, 2010. On October 31, 2011, you requested that the division rescind the state approved APD. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective October 31, 2011.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

Environmental Scientist

une Alaine

cc:

Well File

Bureau of Land Management, Vernal

